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Effects of dominance frequency of plant species to increase productivity of cattle feed in Japan

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Abstract

The objectives of this study were to determine the dominance frequency of plant species between spring and summer, to provide useful information toward the conservation to increasing production cattle feed in grazing area in Hiroshima, Japan. The frequency of dominant plant species can adapt in the spring and summer, that consist of *Paspalum dilatatum* (spring 69.32% and summer 78.98%), *Paspalum notatum* (spring 47.73% and summer 98.30%), *Trifolium repens* (spring 73.86% and summer 81.25%). The observed plant species also influenced some productivity, which consists of plant height (spring 16.64 cm and summer 21.55 cm), vegetation cover rates (spring 77.18% and summer 81.36%, chlorophyll content (spring 41.72 mg/g Fw and summer 36.28 mg/g Fw), diversity index (spring 0.94 and summer 0.80), evenness index (spring 0.93 and summer 0.67), and species numbers (spring 32.0 and summer 21.0). It is proposed that *Paspalum dilatatum*, *Paspalum notatum*, and *Trifolium repens*, can be used to increase productivity of plant species as cattle feeds.

Keywords: Dominance of plant species, spring, summer, cattle feed

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